

projects backward over the anal pencil; each lateral segment from two to ten is produced into an oval prominence from which projects a radiating fascicle of long setæ similar to those forming the dorsal rows; the basal area dorsally, and the ventral surface of the head are glabrous, but the central-dorsal region is crossed by two transverse rows of setæ, and the anterior region is thickly setate; a pair of setæ is usually present on the occiput; anal pencil formed of two dense fascicles of long, slender, delicately-spined hairs that terminate distally in enlarged, recurved, fimbriated processes. Length of adult specimens 3.0 mm.

Hab.—Western Washington. Usually found in damp places, beneath the bark of decaying logs, in moss, under dead leaves, etc. As a rule they are gregarious, and occur in colonies of considerable magnitude, but so far only females have been observed.



STUDIES IN CEPHALOIDÆ.

By THOS. L. CASEY.

The very unexpected discovery of a remarkable divergence in tarsal and unguis structure, in a specimen from Placer County, California, recently sent to me by Mr. Fuchs under the name *Cephaloon bicolor* Horn, led me to investigate the material in my cabinet from a generic point of view, and to the conclusion that the genus *Cephaloon*, as heretofore known to us, is a complex of several genera having a strong family likeness among themselves. These genera may be distinguished as follows:

Tarsi slender, the penultimate joint unmodified, the claws nearly straight, arcuate at tip and pectinate within.

Appendage of the tarsal claws broad and obtusely rounded at apex.

Last joint of the maxillary palpi conical, the inner side but slightly shorter than the outer, the oblique apex short and straight; antennæ short, the last three joints broader, but not notably elongate **Cephaloon** Newm.

Last joint of the maxillary palpi with the inner side very short, the apex strongly oblique and arcuate; antennæ longer and slender, the last three joints not notably enlarged or elongate, but differing in form and color from those which precede **Sponidium** n. g.

Appendage of the tarsal claws very slender, acutely pointed at tip; antennæ very long and slender, the last three joints greatly elongated, but not at all broader **Typitium** n. g.

Tarsi stouter and shorter, the penultimate joint quadrate, feebly bilobed and densely pubescent beneath, the claws subevenly arcuate, not at all pectinate within and non-appendiculate **Drachylis** n. g.

The genus *Cephaloon* has for its type *lepturides* Newm., which is distinguishable at once from any other species of the family by its short clavate antennæ. It inhabits the lake regions of North America.

The species of *Sponidium* are somewhat numerous, and are exclusively western, inhabiting the true Pacific coast faunal province. Those before me may be separated by the following characters from the female throughout :

Eyes separated on the front by about their own width; antennæ much longer than the head and prothorax together, the eighth joint but little longer than the ninth. Washington (State) . **tenuicorne** Lec.

Eyes separated on the front by very much less than their own width; antennæ but little longer than the head and prothorax, with the eighth joint generally much longer than the ninth.

Head shorter, the basal part, including the eyes, distinctly wider than long, the distance, from a vertical viewpoint, from the posterior limit of the eyes to the neck but little greater than the distance from the same point to the inner limit of the eye; prothorax but little longer than wide, broadly impressed along the middle anteriorly. British Columbia (Caraboo District) . . **piceum** Horn.

Head more elongate, the basal part as long as wide, or very nearly; distance from the posterior limit of the eyes to the neck much greater than to the inner limit of the eye; prothorax distinctly longer than wide, generally unimpressed.

Neck broader, as wide as the interantennal distance, the nuchal constriction nearly straight across the dorsal surface. Idaho.

ornatum Csy.

Neck more slender, distinctly narrower than the interantennal distance, the nuchal constriction strongly arcuate.

Tempora straight; distance from the epistomal suture to the eyes almost as great as the length of the epistoma; body testaceous, the elytra black throughout. Coast regions of middle California.

bicolor Horn.

Tempora broadly and just visibly sinuate; distance from the epistomal suture to the eyes much less than the length of the epistoma; elytra generally pale, with the suture narrowly blackish.

Rocky Mountains **versicolor** Csy.

A specimen of *versicolor*, sent recently by Mr. Fuchs, is labeled "British Columbia (Caraboo District)." The species may possibly extend along the Rocky Mountains as far to the southward as Colorado.

Cephaloon unguare, of LeConte, is the type and only species of *Typitium*; it is of unusually slender form and occurs in the northern Atlantic regions of North America.

The unique type of *Drachylis* may be described as follows from the female :

Drachylis simulans n. sp.—Form as in *Sponidium bicolor*, but slightly broader across the humeri, rufo-testaceous throughout, the elytra and metasternum black; pubescence minute, pale, decumbent and dense as usual. Head elongate, broadly convex, minutely, closely punctulate, the eyes separated on the front by very nearly their own width; palpi and antennæ missing in the type. Prothorax slightly elongate, of the usual campanulate form, with everted and acute basal angles; median line very feebly impressed near the middle; surface convex and minutely, closely punctulate. Scutellum rufous, rather pointed behind. Elytra three times as long as wide, two-fifths wider than the prothorax, the humeri slightly prominent, but rounded; sides more rapidly convergent and rounded toward tip, the individual apices rounded; disc minutely, closely punctulate, each elytron with two feeble, oblique ridges toward base; suture minutely margined; fifth ventral with a small, rounded notch at apex. Legs long and slender as usual, the tarsi short. Length 12.0 mm.; width 3.1 mm. California (Placer County).

The possession of thick and rather short tarsi, with absence of unguis and pectination, renders this species profoundly different from the others of the family, and, in view of the extreme similarity to *Sponidium bicolor* in outward habitus, is indeed remarkable. The resemblance is so great as to have deceived Dr. Horn, who, upon cursory examination, placed the type example—kindly lent me by Mr. Fuchs—with typical individuals of his *bicolor* from the coast regions of the State (Proc. Cal. Acad. Sci. 2, vi, p. 381).

The general characters of the family have been given in some detail by the writer (Ann. N. Y. Acad. Sci. ix, p. 649). The paper of Dr. Horn, above referred to, was unknown to me at that time, and I am glad to find, from the types communicated by Mr. Fuchs, that there has been no confusion and redescription of species, the two described by me being amply distinct from those of Dr. Horn made known so short a time before.



RECOLLECTIONS OF OLD COLLECTING GROUNDS.

By H. F. WICKHAM, Iowa City, Iowa.

V.—THE COLORADO DESERT AND ITS ENVIRONS.

Along the boundary between California and Arizona lies a great valley traversed by the lower Colorado River. It is elevated but a few hundred feet above sea-level and is bordered on each side